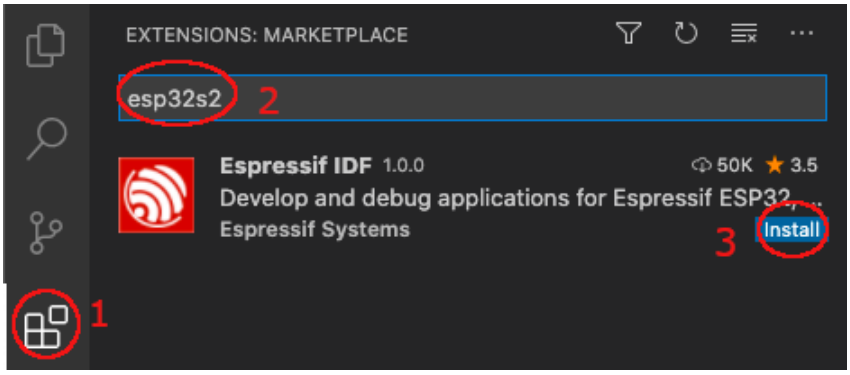
Installation

NOTE: troubleshooting

1. Download and install Visual Studio Code.
2. Open the **Extensions** view by clicking on the Extension icon in the Activity Bar on the side of Visual Studio Code or the **View: Extensions** command ⇧ ⌘ X .
3. Search the extension with any related keyword like `espressif` , `esp-idf` , `esp32` , `esp32s2` , etc.
4. Install the extension.
5. Install ESP-IDF Prerequisites and, if using WSL2, the required packages specified in WSL Documentation.



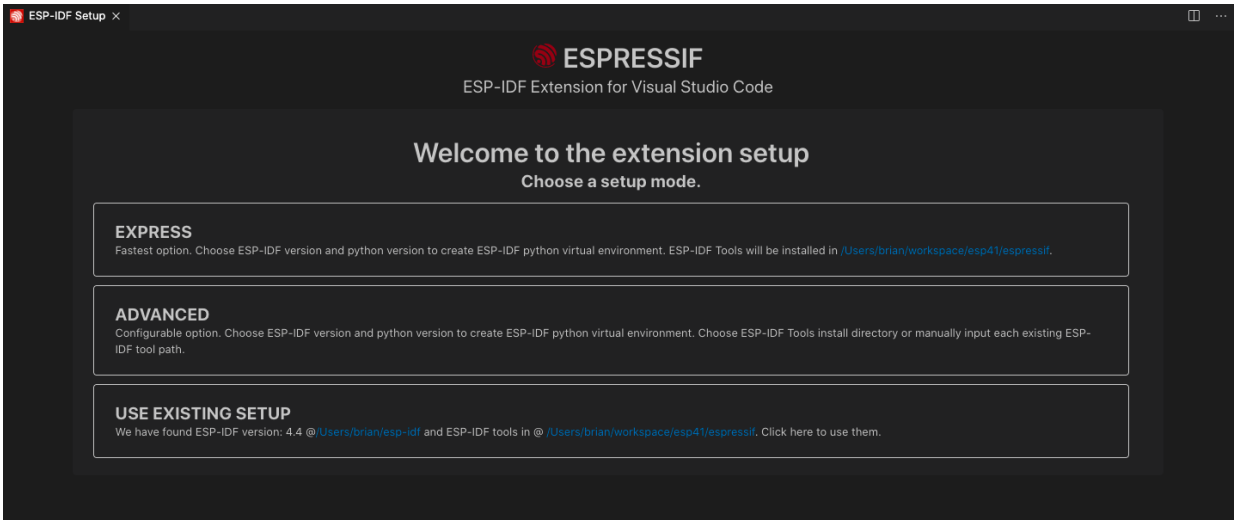
6. (OPTIONAL) Press `F1` and type **ESP-IDF: Select where to save configuration settings**, which can be User settings, Workspace settings or workspace folder settings. Please take a look at Working with multiple projects for more information. Default is User settings.
7. In Visual Studio Code, select menu "View" and "Command Palette" and type [configure esp-idf extension]. After, choose the **ESP-IDF: Configure ESP-IDF extension** option. You can also choose where to save settings in the setup wizard.
8. Now the setup wizard window will be shown with several setup options: **Express**, **Advanced** or **Use existing setup**.

NOTE: **Use existing setup** setup mode option is only shown if:

- `esp-idf.json` is found in the current `idf.toolsPath` (MacOS/Linux users) or `idf.toolsPathWin` (Windows users). This file is generated when you install ESP-IDF

with the IDF Windows installer or using IDF-ENV.

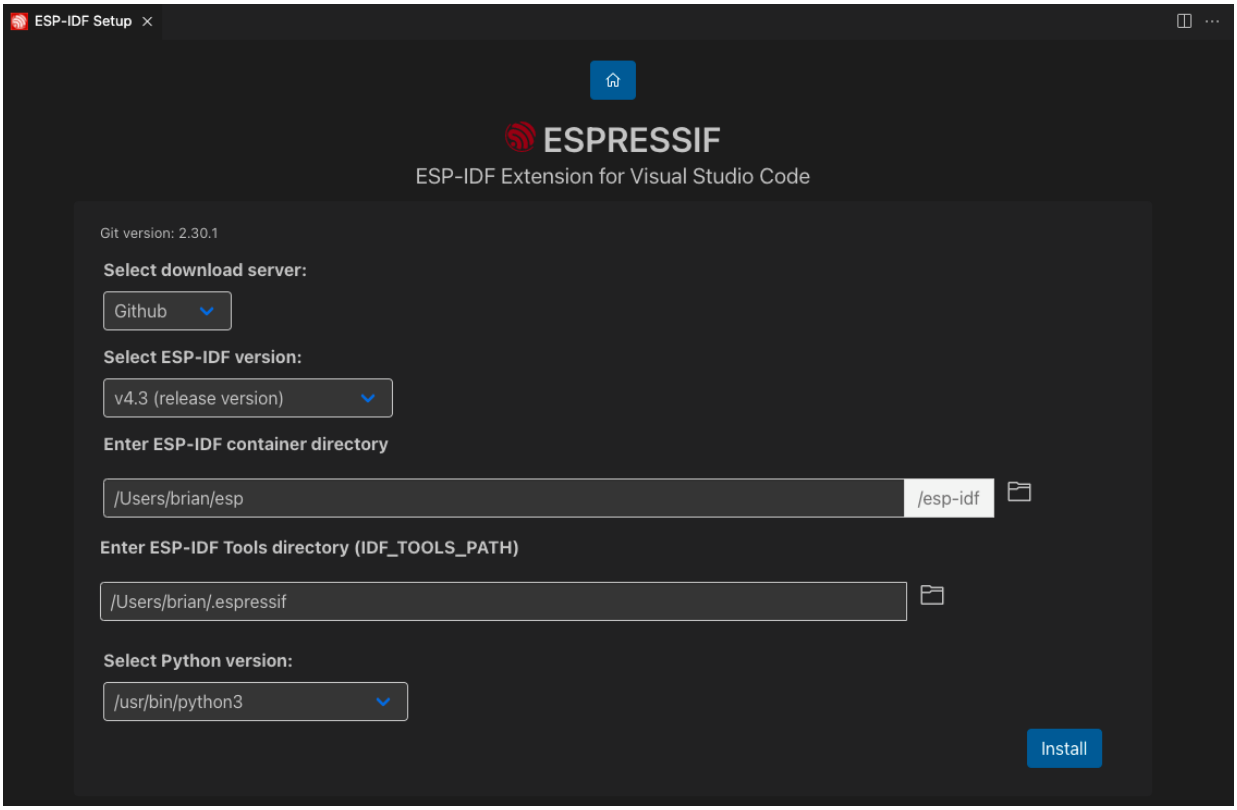
- ESP-IDF is found in `idf.espIdfPath` or `idf.espIdfPathWin`, `IDF_PATH` environment variable, `$HOME/esp/esp-idf` on MacOS/Linux and `%USERPROFILE%\esp\esp-idf` or `%USERPROFILE%\Desktop\esp-idf` in Windows.
- ESP-IDF Tools and ESP-IDF Python virtual environment for the previous ESP-IDF are found in `idf.toolsPath` or `idf.toolsPathWin`, `IDF_TOOLS_PATH` environment variable, `$HOME\.espressif` on MacOS/Linux and `%USERPROFILE%\.espressif` on Windows.



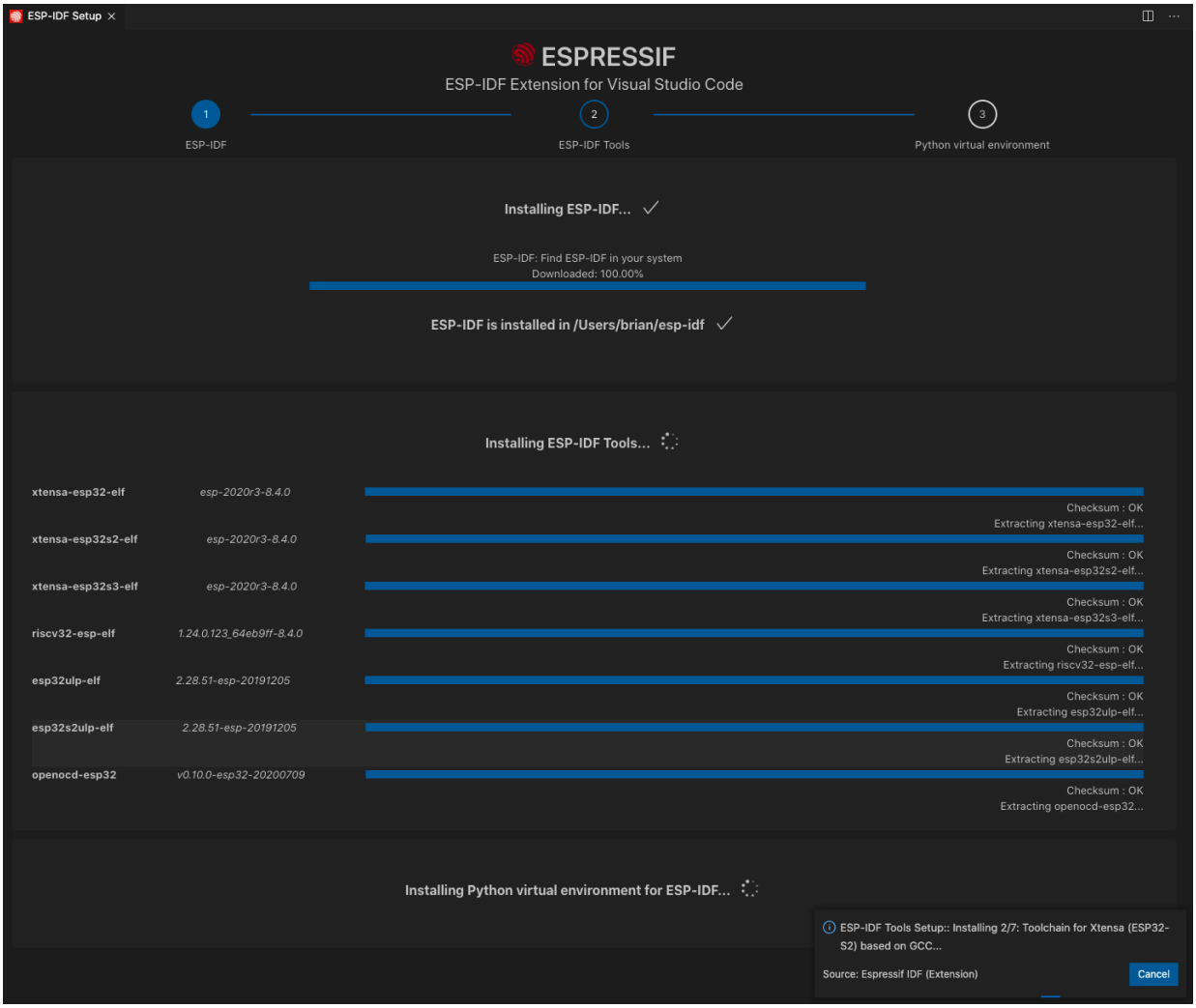
9. Choose **Express** for the fastest option (or **Use existing setup** if ESP-IDF is already installed)
10. If you choose **Express** setup mode:
    - Pick an ESP-IDF version to download (or find ESP-IDF in your system) and the python executable to create the virtual environment.
    - Choose the location for ESP-IDF Tools and python virtual environment (also known as `IDF_TOOLS_PATH`) which is `$HOME\.espressif` on MacOS/Linux and `%USERPROFILE%\.espressif` on Windows by default.

      NOTE: Windows users don't need to select a python executable since it is part of the setup.

NOTE: Make sure that `IDF_PATH` and `IDF_TOOLS_PATH` doesn't have any spaces to avoid any build issues.

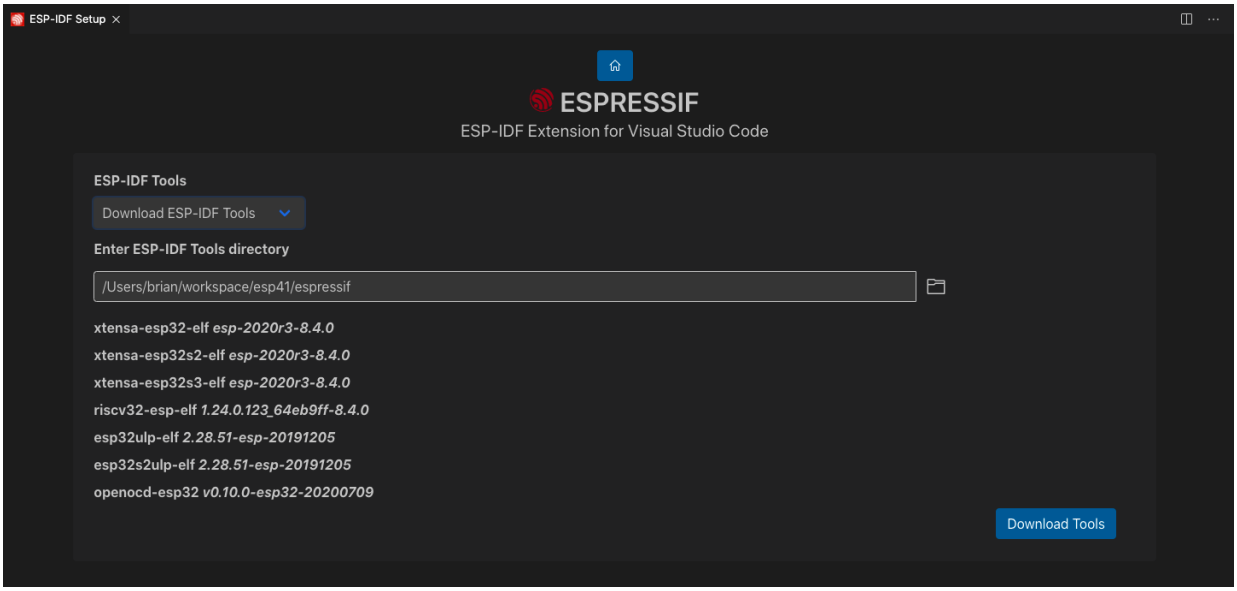


11. The user will see a page showing the setup progress status showing ESP-IDF download progress, ESP-IDF Tools download and install progress as well as the creation of a python virtual environment.



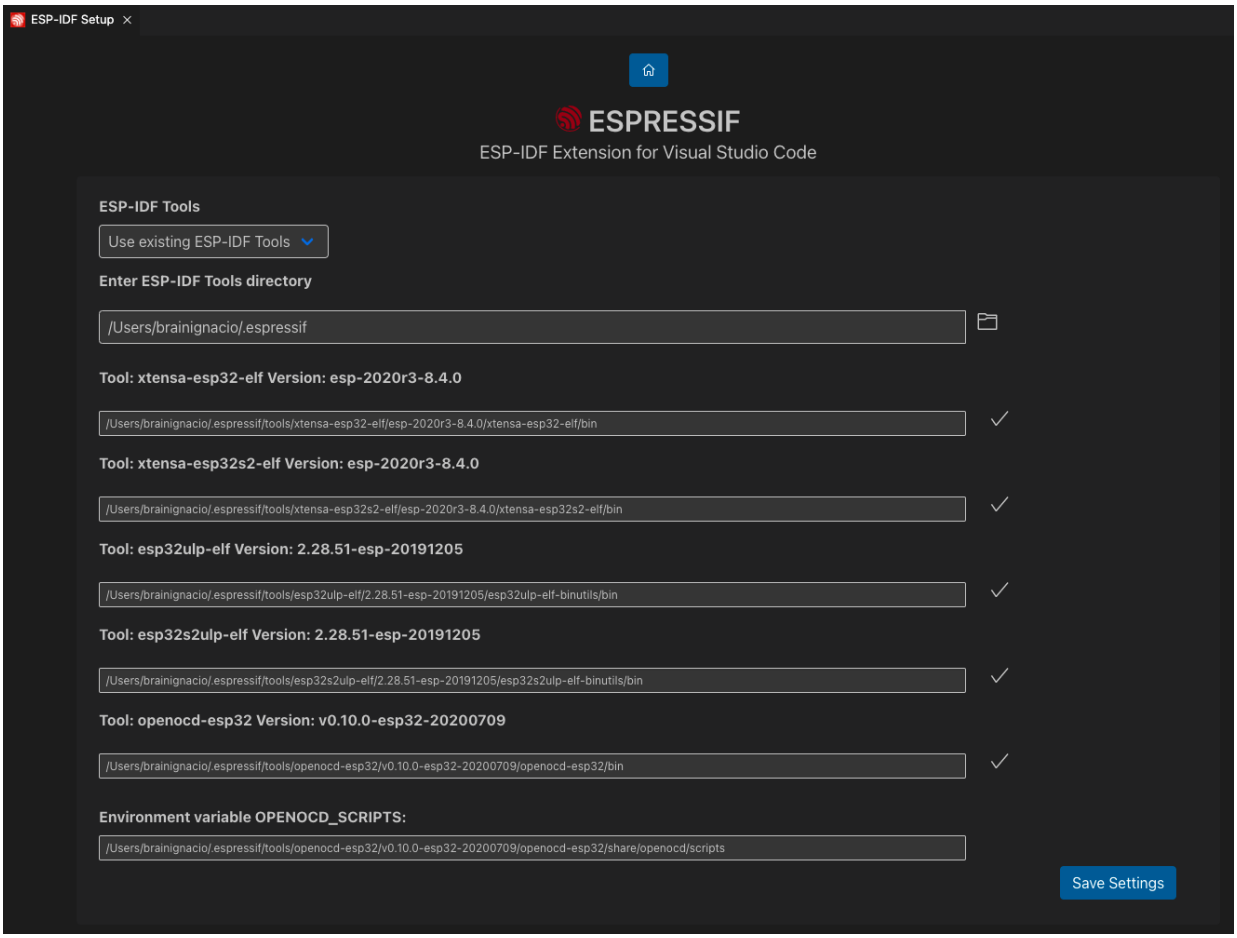
12. (OPTIONAL) If the user have chosen the **Advanced** option, after ESP-IDF is downloaded and extracted, select to either download ESP-IDF Tools or manually provide each ESP-IDF tool absolute path and required environment variables.

    NOTE: Consider that `IDF_PATH` requires each ESP-IDF tool to be of the version described in `IDF_PATH` /tools/tools.json. If it is desired to use a different ESP-IDF tool version, check JSON Manual Configuration

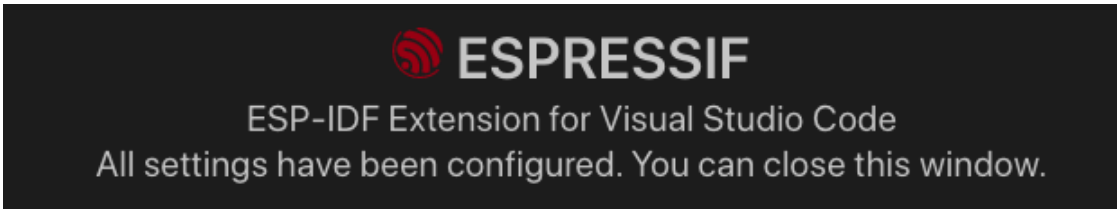


13. (OPTIONAL) If the user has chosen the **Advanced** mode and selected to manually provide each ESP-IDF tool absolute path, please enter the executable container directory for each binary as shown below:

    NOTE: Check JSON Manual Configuration for more information.



14. If everything is installed correctly, the user will see a message that all settings have been configured. You can start using the extension.



NOTE: The advance mode allows the user to choose to use existing ESP-IDF tools by manually entering each ESP-IDF tool absolute path. Make sure each ESP-IDF tool path doesn't have any spaces.

15. Now that the extension setup is finally done, check the basic use to learn how to use the SDK Configuration editor, build, flash and monitor your Espressif device.

NOTE: Visual Studio Code has many places where to set configuration settings. This extension uses the `idf.saveScope` configuration setting to determine where to save settings, Global (User Settings), Workspace and WorkspaceFolder. Please review vscode settings precedence.

NOTE: the setup wizard will install ESP-IDF Python packages, this extension (`EXTENSION_PATH`/requirements.txt) and ESP-IDF debug adapter (`EXTENSION_PATH`/esp_debug_adapter/requirements.txt) python packages. Make sure that if using an existing python virtual environment that installing these packages doesn't affect your virtual environment. The `EXTENSION_PATH` is:

- Windows: `%USERPROFILE%\.vscode\extensions\espressif.esp-idf-extension-VERSION`
- Linux & MacOSX: `$HOME/.vscode/extensions/espressif.esp-idf-extension-VERSION`

Installing Nightly Build

To install the nightly build follow the instructions below.

Nightly builds are available for Visual Studio Code or OpenVSX.

- Open VS Code
- Go to Extensions
- Click on the `...` from the top and choose `Install from VSIX...`
- Browse to the VSIX file you downloaded
- Wait for the extension to install
- Click the Reload button on the VS Code notification that appears